

REITER, *et al.*
Application No.: 10/006,881
Page 2

PATENT

LISTING OF CLAIMS:

1 1. (Original) A method for production of virus or viral antigen, comprising
2 the steps of (a) providing a culture of adherent cells bound to a microcarrier, (b) growing the cell
3 culture to confluence, (c) infecting the cells with a virus and (d) incubating said culture of cells
4 infected with said virus to propagate said virus, wherein the cell density of the biomass of the
5 cell culture grown to confluence is increased (i) prior to step (c) or (ii) after step (c) and
6 maintained at high cell density during step (d).

1 2. (Original) The method according to claim 1, wherein the density of the
2 cell culture grown to confluence is concentrated at least about 1.3 fold.

1 3. (Original) The method according to claim 1, wherein the cell density of
2 the cell culture grown to confluence is between about 0.6×10^6 and about 7.0×10^6 cells/ml.

1 4. (Original) The method according to claim 1, wherein the microcarrier is
2 selected from the group of microcarriers made of dextran, collagen, polystyrene, polyacrylamide,
3 gelatine, glass, cellulose, polyethylene and plastic.

1 5. (Original) The method according to claim 1, wherein the microcarrier
2 concentration in the culture of cells of step (a) is between about 0.5 g/l and about 14 g/l.

1 6. (Original) The method according to claim 1, wherein said cells are
2 selected from the group of adherent cells of VERO, BHK, CHO, RK, RK44, RK13, MRC-5,
3 MDCK, CEF or diploid monolayer cells.

1 7. (Original) The method according to claim 1, wherein said cells bound to a
2 microcarrier are grown in serum free medium.

1 8. (Original) The method according to claim 1, wherein said cells bound to a
2 microcarrier are grown in serum and protein free medium.

1 9. (Original) The method according to claim 1, wherein the virus is selected
2 from the group of Influenza virus, Ross River Virus, Hepatitis A Virus, Vaccinia Virus and

REITER, *et al.*
Application No.: 10/006,881
Page 3

PATENT

3 recombinant derivatives thereof, Herpes Simplex Virus, Japanese encephalitis Virus, West Nile
4 Virus, Yellow Fever Virus and chimeric thereof, Rhinovirus and Reovirus.

1 10. (Original) The method according to claim 1, further comprising the step
2 (e) harvesting the virus propagated.

1 11. (Original) A method for production of purified virus or virus antigen
2 comprising the steps of:

- 3 (a) providing a culture of adherent cells bound to a microcarrier;
4 (b) growing the cell culture to confluence;
5 (c) infecting the culture of cells with a virus;
6 (d) incubating said culture of cells infected with said virus to propagate said virus;
7 (e) harvesting the virus produced; and
8 (f) purifying said virus harvested, wherein the cell density of the biomass of the
9 cell culture grown to confluence is increased
10 (i) prior to step (c) or
11 (ii) after step (c) and maintained at high cell density during step (d).

1 12. (Original) The method according to claim 11, wherein the virus produced
2 is harvested from the cell culture supernatant.

1 13. (Original) The method according to claim 11, wherein the virus produced
2 is harvested from the cell biomass.

1 14. (Original) A method for production of Influenza virus, comprising the
2 steps of:

- 3 (a) providing a culture of adherent cells bound to a microcarrier;
4 (b) growing the cell culture to confluence;
5 (c) infecting the cells with an Influenza virus; and

REITER, *et al.*
Application No.: 10/006,881
Page 4

PATENT

6 (d) incubating said culture of cells infected with said Influenza virus to propagate
7 said virus, wherein the cell density of the biomass of the cell culture grown to confluence is
8 increased

9 (i) prior to step (c) or

10 (ii) after step (c) and maintained at high cell density during step (d).

1 15. (Original) The method according to claim 14, wherein said cells are
2 VERO cells.

1 16. (Original) The method according to claim 14, wherein said cells are
2 MDCK cells.

1 17. (Original) The method according to claim 14, wherein said cells bound to
2 a microcarrier are grown in serum free medium.

1 18. (Original) The method according to claim 14, wherein said cells bound to
2 a microcarrier are grown in serum and protein free medium.

1 19. (Original) The method according to claim 14, wherein the cell culture grown to
2 confluence is concentrated at least about 1.3 fold.

1 20. (Original) The method according to claim 14, wherein further comprising
2 the step (c) of harvesting said Influenza virus or Influenza virus antigen produced.

1 21. (Original) The method according to claim 14, further comprising the step
2 (f) of purifying said Influenza virus harvested.

1 22-23. (Cancelled).